

Commonwealth of Virginia Clinical Study

Prenatal Care Clinical Study SFY 2004



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Section I

Prenatal Care Clinical Study

Introduction

The Commonwealth of Virginia Department of Medical Assistance Services (DMAS) is charged with the responsibility of evaluating the quality of prenatal care provided to Medical Assistance recipients enrolled in the MEDALLION Primary Care Case Management (PCCM) and Medallion II Managed Care Organization (MCO) programs. To ensure that the care and outcomes related to pregnancies and births of women enrollees meets acceptable standards for access, timeliness, and quality, DMAS contracts with the Delmarva Foundation for Medical Care, Inc. (Delmarva) to serve as the External Quality Review Organization (EQRO).

This report summarizes the results of Delmarva's analysis of prenatal care for participants in the MEDALLION and Medallion II program. Timely and high quality prenatal care is critical for both the mothers and the children that are born. Beginning care within the first trimester and obtaining the recommended numbers of prenatal visits are essential to reduce the likelihood of complications and premature deliveries. Complications and premature births can result in long-term health problems for the child and enormous expense to the health care system. Because many women are enrolled in Medicaid as a result of their pregnancy and because these women are from racial and ethnic groups that historically have had poorer quality prenatal care, it is critical that DMAS understand factors associated with poorer outcomes and that they compare the performance of the MEDALLION and Medallion II programs and the Medallion II MCOs against each other and with external norms. This comparison will assist DMAS in identifying any programmatic differences that might affect access to early prenatal care or impact birth outcomes.

Assessing the quality of prenatal care during SFY '03 to SFY '04 is the focus of this report. The sections that follow provide an overview of the specific purposes and objectives of this report, describe the methodology employed to analyze available data, and summarize key study findings and recommendations. This report follows the structure of previous reports, in which short summaries of these sections are followed by a series of “at a glance” results that provide tables, figures, and additional detail.

Purpose and Objectives

Delmarva Foundation is under contract with the Virginia Department of Medical Assistance Services (DMAS) to provide external quality review of the managed care programs. This prenatal care study provides information about the care and outcomes related to pregnancies and births of women who were Medicaid recipients during State Fiscal Year (SFY) 2003 (July 1, 2002 through June 30, 2003) and SFY '04 (July 1, 2003 through June 30, 2004). Access, timeliness, and quality of care are expectations for all persons enrolled in the MEDALLION and Medallion II programs. This expectation is particularly critical for pregnant women and their babies. Ascertaining whether these requirements have been met is the major goal of this report.

Specifically, this report addresses a number of objectives:

- Determining the prevalence of obtaining prenatal care in the first trimester for women enrolled in Medicaid and comparing this prevalence to earlier periods and established norms.
- Describing the reasons for Medicaid enrollment for women who gave birth in SFY '03 and SFY '04.
- Comparing the percentages of women who obtained prenatal care in the first trimester across programs and plans.
- Ascertaining whether delayed enrollment was a factor in the failure to obtain early and adequate prenatal care.
- Examining demographic factors such as age and race that may be associated with poorer care processes and outcomes.
- Determining the prevalence of low and very low birth weight children for women enrolled in Medicaid and comparing this prevalence to earlier periods and established norms.
- Comparing the prevalence of low and very low birth weight children for women enrolled in fee for service, MEDALLION and the Medallion II MCOs.

Delmarva's approach to accomplishing these objectives is described in the following section.

Methodology

The study population includes women for whom evidence of a birth was found in the Virginia Birth Registry and who were also found in the DMAS enrollment file. The study population was limited to those who were enrolled in managed care or the fee-for-service (FFS) program for at least 280 days prior to delivery. Women eligible for Medicaid due to pregnancy were also included, regardless of enrollment span. The study population is divided into three categories based upon Medicaid eligibility criteria. The categories were used in order to reduce the confounding of results that may be attributed to the length of time that women are in Medicaid and the length of time they are enrolled in a Medicaid program.

The categories are as follows:

- Women who were newly eligible for Medicaid due to pregnancy. This group is labeled Newly Medicaid Eligible.
- Women who receive Supplemental Security Income. This group is labeled SSI.
- Women in all other eligibility categories (including Temporary Assistance to Needy Families, refugees, low-income families with children, etc.). This group is labeled Other Medicaid.

Results are provided for the entire Medicaid population and by Medicaid program, demographic characteristics, and managed care organization (MCO). The Medicaid programs are as follows:

- FFS, considered traditional Medicaid.
- The MEDALLION primary care case management (PCCM) program in which recipients select a primary care provider who provides a medical home and authorizes some specialty care.
- The Medallion II MCO program in which recipients enroll in an MCO that provides care through its network of providers.

After merging the birth registry and enrollment data, analyses were performed using SAS and SAS programs. While most analyses replicate ones performed for last years report, the SAS programs were modified to reflect the new state fiscal year being analyzed, changes in the MEDALLION PCCM program and in the MCOs participating in the Medallion II program, and to obtain more detailed information about recipients racial background.

Results were validated using the following steps:

- SAS programming code was reviewed by a research scientist at Delmarva to validate the analytic logic
- Results from these programs were compared with results obtained last year to validate that sample sizes were as expected and results were similar.

Findings

Major findings are summarized in the bullet points shown below. These findings as well as additional and more detailed results are shown in a series of tables and figures contained in Section Two.

- The majority of women in Medicaid, 76%, who gave birth in SFY '03 and SFY '04 began prenatal care in the first trimester of pregnancy. This compares to 77% in SFY '02.
- The majority of women in Medicaid who gave birth, 89% (SFY '03) and 88% (SFY '04), were newly eligible for Medicaid due to pregnancy; 58% (SFY '03) and 57% (SFY '04) of women newly enrolled had a start of prenatal care that came before their Medicaid application date.

- 70% of women in the FFS program began prenatal care in the first trimester in SFY '03 and 81% of these women received the expected number of prenatal care visits. 71% of women in the FFS program began prenatal care in the first trimester in SFY '04 and 81% of these women received the expected number of prenatal care visits.
- 52% (SFY '03) and 49% (SFY '04) of women in FFS, who became Medicaid eligible because of pregnancy, were determined eligible for Medicaid in the third trimester of pregnancy. These women received retroactive eligibility to Medicaid, which covered their care from conception or for three months prior to their application date, whichever came later. This suggests a 21-25% improvement from SFY '02 in the rate of women deemed to be Medicaid eligible prior to the third month of pregnancy.
- 30% (SFY '03) and 26% (SFY '04) of women in MEDALLION, who became Medicaid eligible because of pregnancy, were in the third trimester when they were enrolled in the MEDALLION program. The percentage enrolled in MEDALLION prior to the third semester increased from 58% in SFY '02 to 70% in SFY '03 and 74% in SFY '04.
- 35% (SFY '03) and 31% (SFY '04) of women in Medallion II, who became Medicaid eligible because of pregnancy, were in the third trimester when they were enrolled in an MCO. This represents a 7% to 11% decrease from SFY '02.
- 21% (SFY '03) and 22% (SFY '04) of women enrolled in FFS were age 30 and above. This is a higher percentage than observed in the MEDALLION and Medallion II programs for both SFY '03 and SFY '04. The percentage of women in FFS between the ages of 20 and 29 (60 % in FFS in both SFY '03 and SFY '04 vs. 56 % in SFY '02) was lower than in MEDALLION and Medallion II for both SFY '03 and SFY '04.
- As compared with white women, African-American, Asian, and Hispanic women tended to initiate care later in pregnancy and have fewer visits once care was initiated. African-American women had a markedly higher percentage of both low and very low birth weight babies. Disparities between whites and African-American women remained constant from SFY '02, but the percentage of births to white women decreased while the percentage born to African-American women remained constant and the percentage born to other minorities increased.
- The rates of low and very low birth weight for infants was highest for women in the FFS program for SFY '03 and SFY '04. These percentages are essentially unchanged from SFY '02.

Conclusions and Recommendations

- The majority of women enrolled in Medicaid who delivered babies were newly eligible for Medicaid due to pregnancy and started prenatal care before applying for Medicaid. Therefore, we recommend developing approaches that will publicize the availability of Medicaid for eligible women so that a higher percentage can begin appropriate prenatal care in their first trimester.

- A higher proportion of women in FFS who were not new to Medicaid were African American and age 19 and under. Hispanic women were also highly represented in the FFS program as compared to previous years. We recommend further study to identify the reasons why these populations are less likely to enter Medicaid II programs. We also recommend that additional targeted efforts be made to improve the early start of prenatal care for these populations.

A higher percentage of women in managed care received the expected number of prenatal care visits and had lower rates of poor birth outcomes. While women appear to be entering these programs earlier than in the past, we recommend continued efforts to enroll pregnant women even earlier in these programs. Success in this effort may increase the adequacy of prenatal care and result in better birth outcomes.

Section II

AT-A-GLANCE - Prenatal Trends and Outcomes

76% of Women Started Prenatal Care in the First Trimester of Pregnancy During both SFY '03 and SFY '04

Figure 1 displays the trend analyses of initiation of prenatal care within the first trimester of pregnancy (SFY 2000–2004). Rates remained essentially unchanged between SFY 2000 and SFY '02. Rates of initiation of prenatal care within the first trimester were observed to be comparable for both SFY '03 and SFY '04 as compared to SFY '02. Initiation of prenatal care within the first trimester decreased only slightly between SFY '02 and SFY '04.

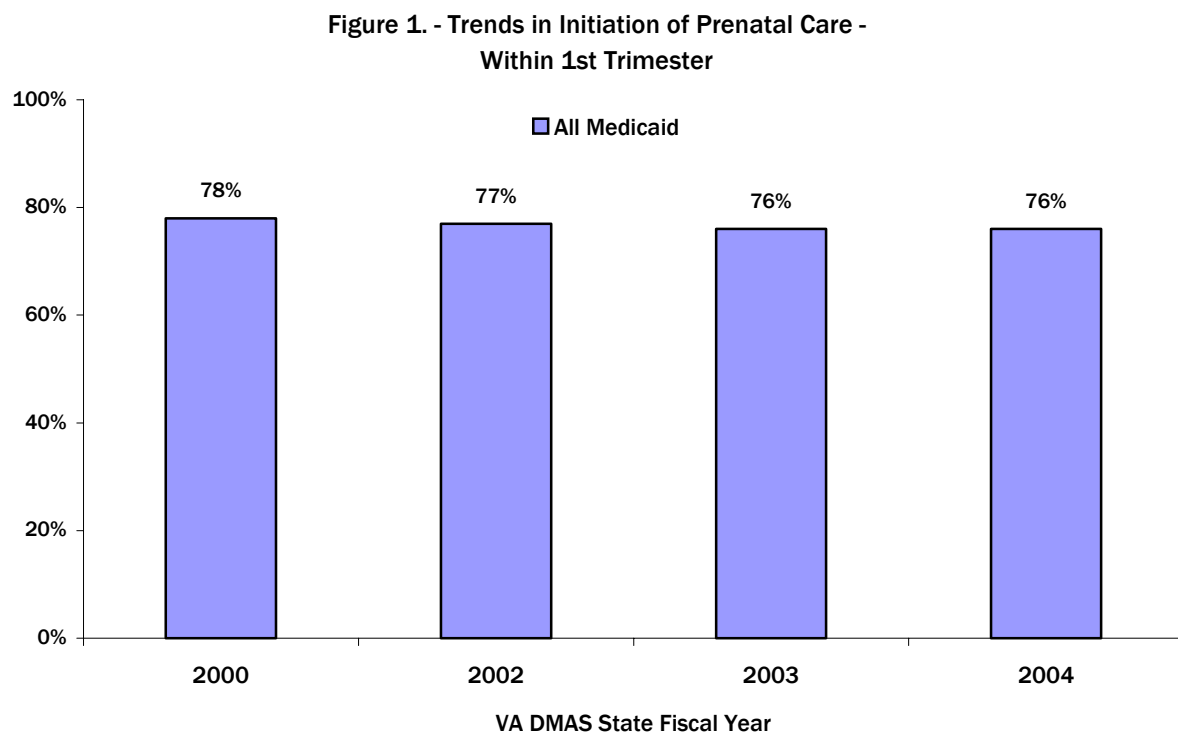
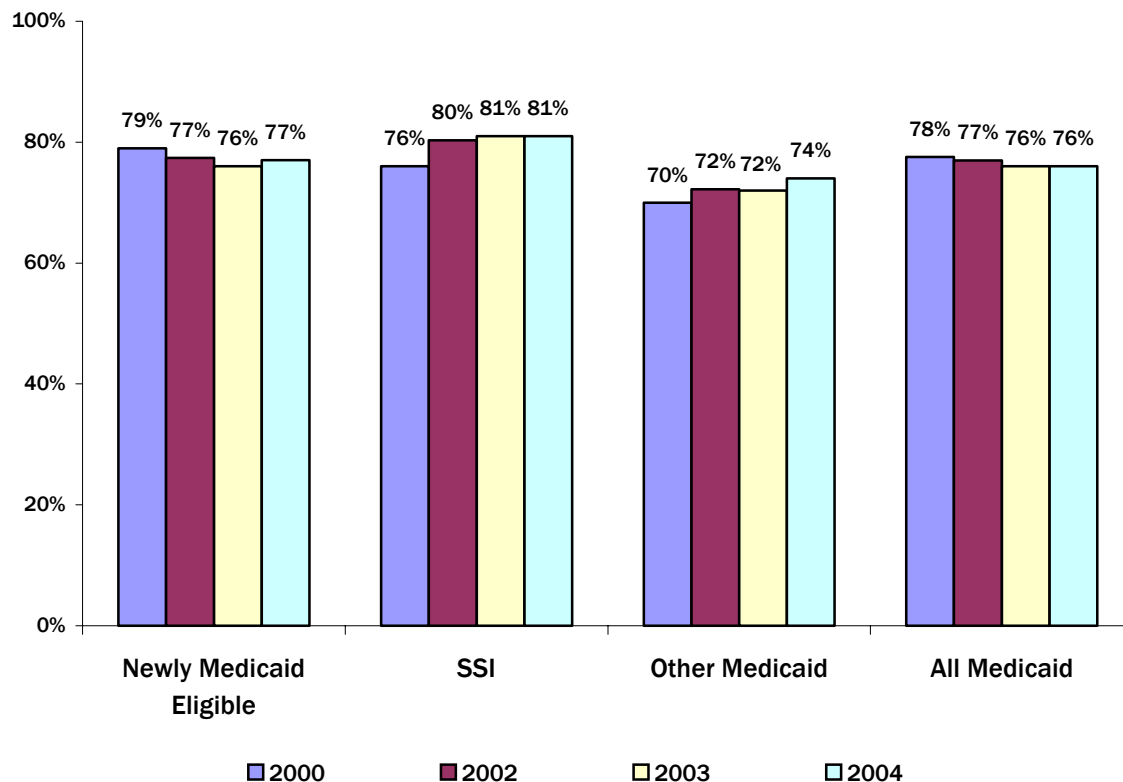


Figure 2. displays SFY '03 and SFY '04 rates for the timely initiation of prenatal care within the first trimester overall and for three distinct Medicaid populations. A slight decrease (1%) in the percentage of women who received prenatal care within the first trimester was observed for the All Medicaid group in SFY '03 and

SFY '04 when compared to previous years. However, the rates for the newly Medicaid eligible group increased one percentage point from SFY '03 to SFY '04.

Figure 2. Trends in Initiation of Prenatal Care Within 1st Trimester - Specific Medicaid Populations



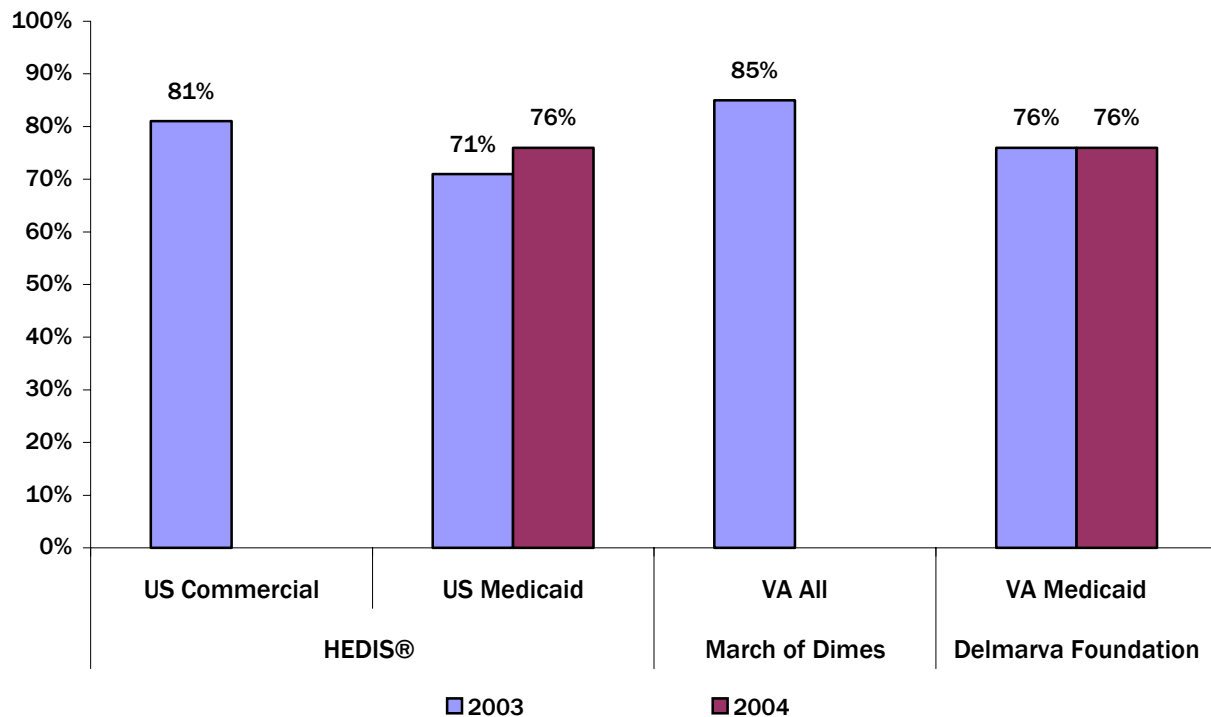
Virginia Medicaid Results for Initiation of Prenatal Care in SFY '03 and SFY '04 Compare Favorably with National and Virginia Statewide Benchmarks

Figure 3. displays the national HEDIS® results for commercial and Medicaid populations and Virginia statewide results from March of Dimes - 2002 and Virginia Medicaid based on most current data available – SFY '03 and SFY '04.^{1,2} Although VA Medicaid rates are somewhat below the overall rates in VA and the US, the VA Medicaid rates are 5% (SFY '03) and 0% (SFY '04) above the national rates for the Medicaid population (CY 2003 and CY 2004).

¹ The Health Employer Data and Information Set (HEDIS®) is a nationally recognized benchmark for health plan performance compiled by the National Committee for Quality Assurance. Data reported here is for CY 2003 for Commercial population and CY 2003 and 2004 for Medicaid population.

² March of Dimes data is drawn from their 2005 report, but is based on data from CY 2002. Delmarva data is based on SFY '03 and SFY '04.

**Figure 3. Initiation of Prenatal Care -
Within First Trimester - Benchmarks**



Adequate Prenatal Care Rates Have Decreased Slightly Between SFY '02 and SFY '03; Adequate Prenatal Care Rates Are Comparable Across SFY '03 and SFY '04

A standard measure of the adequacy of prenatal care was used. This measure classifies whether each pregnant woman met the following two criteria:

- She began receiving prenatal care within four months of conception, and
- She had the expected number of prenatal care visits.³⁴

³ Results from 1998 and 1999 provided by George Mason University

⁴ Kotelchuck, M. (1994). An evaluation of the Kessner Adequacy of Prenatal Care Index and a proposed Adequacy of Prenatal Care Utilization Index. American Journal of Public Health, 84(9), 1414-1420.

Figure 4 displays the proportion of mothers receiving adequate prenatal care in SFY 1998–2004. Overall, the percentage of women receiving adequate care has remained fairly consistent. It should be noted that there currently exists no Adequacy of Prenatal Care benchmark.

Figure 4. Trends in Women Receiving Adequate Care

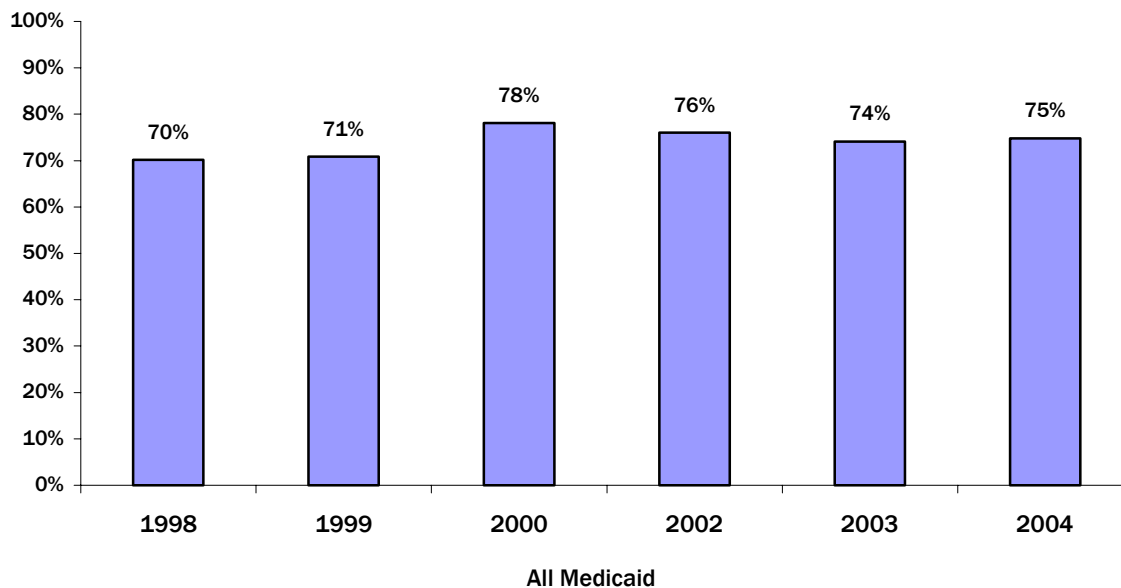


Figure 5 summarizes the percentages of women receiving adequate care in SFY 2000 through SFY '04. Marginal increases occurred in the SSI group. The Newly Medicaid Eligible group, the largest Medicaid group, dropped five and four percentage points from SFY 2000 to SFY '03 and SFY '04 respectively and the Medicaid population decreased three percentage points over the same time period. The other Medicaid group decreased one and two percentage points from SFY '02 to SFY '03 and SFY '04 respectively.

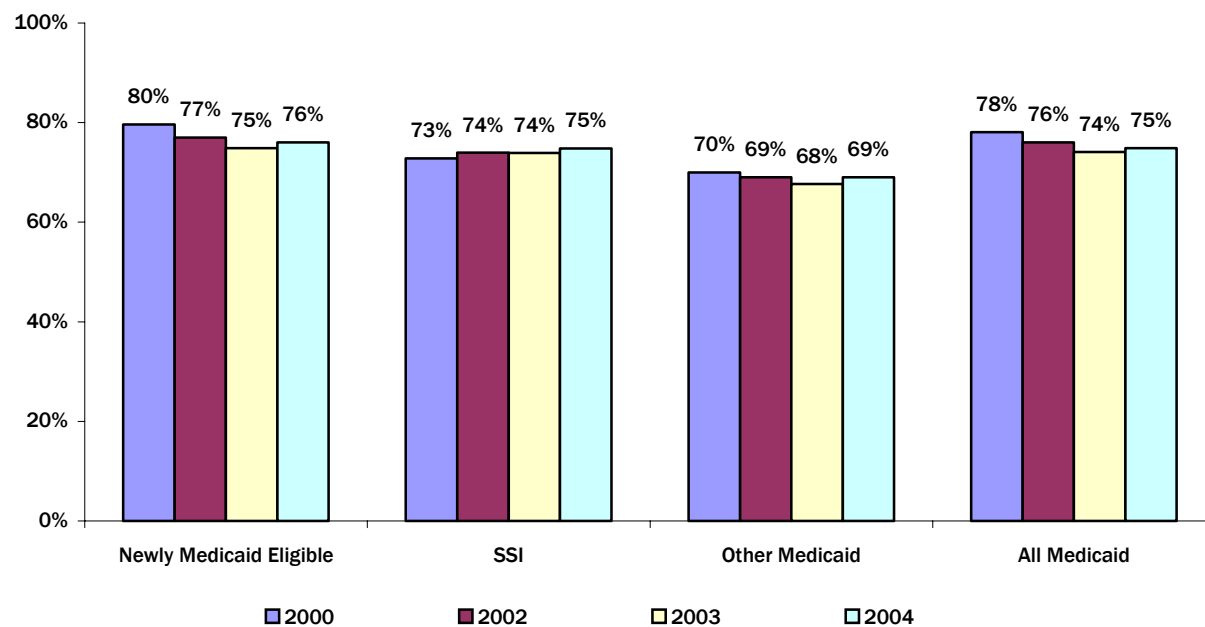
Figure 5. Trends in Women Receiving Adequate Care - Specific Medicaid Populations

Figure 6 displays the Virginia Medicaid birth weight outcomes for SFY 1998–2004. The overall low birth weight rate increased between SFY '02 and SFY '03 and between SFY '03 and SFY '04. Very low birth weight rates were comparable for SFY '02 and SFY '03 and slightly increased between SFY '03 and SFY '04.

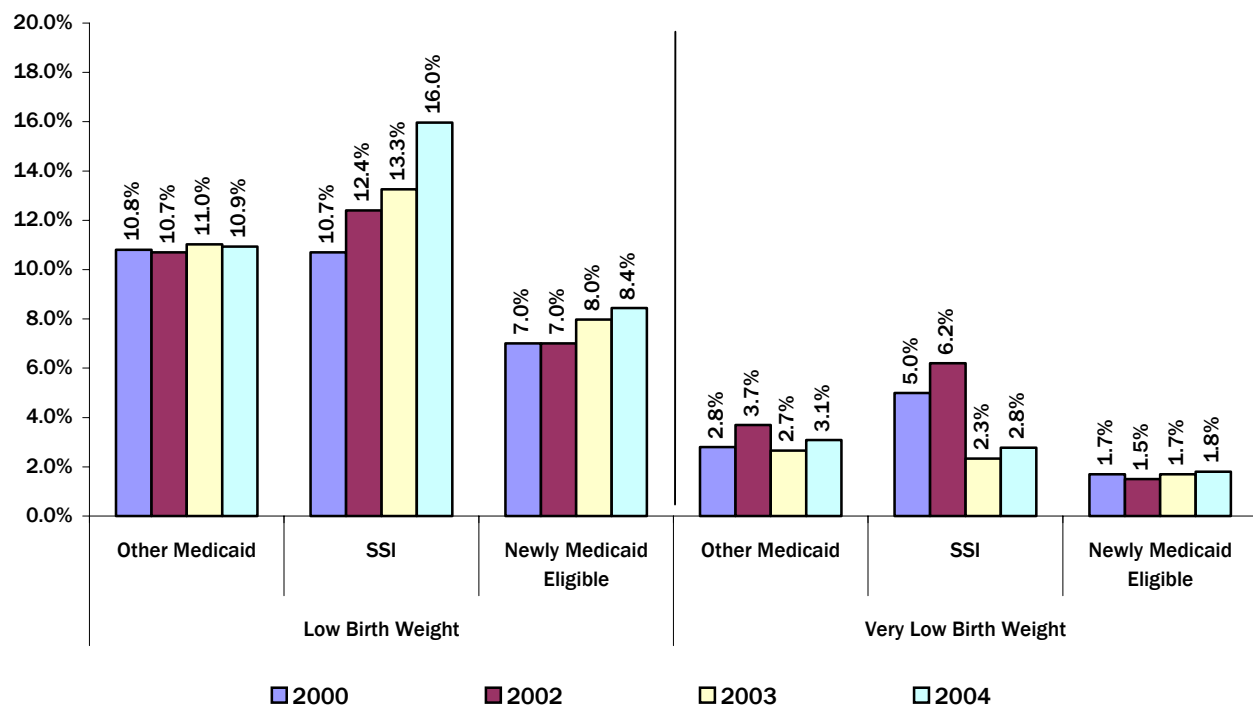
Figure 6. Trends in Low and Very Low Birth Weight Rates*



*Low birth weight = 1,501 to 2,500 grams; very low birth weight = 1,500 grams or less.

Figure 7 displays the birth weight outcomes for specific Medicaid populations in SFY 2000 through SFY '04. Percentage changes in the SSI group should be interpreted very cautiously because this group is very small (1.6% and 1.7% for SFY '03 and SFY '04). Rates in the Newly Eligible group, which includes 9.8% and 10.6% of all newborns for SFY '03 and SFY '04 included in the analysis, were slightly higher.

Figure 7. Trends in Low and Very Low Birth Weights - Specific Medicaid Populations*

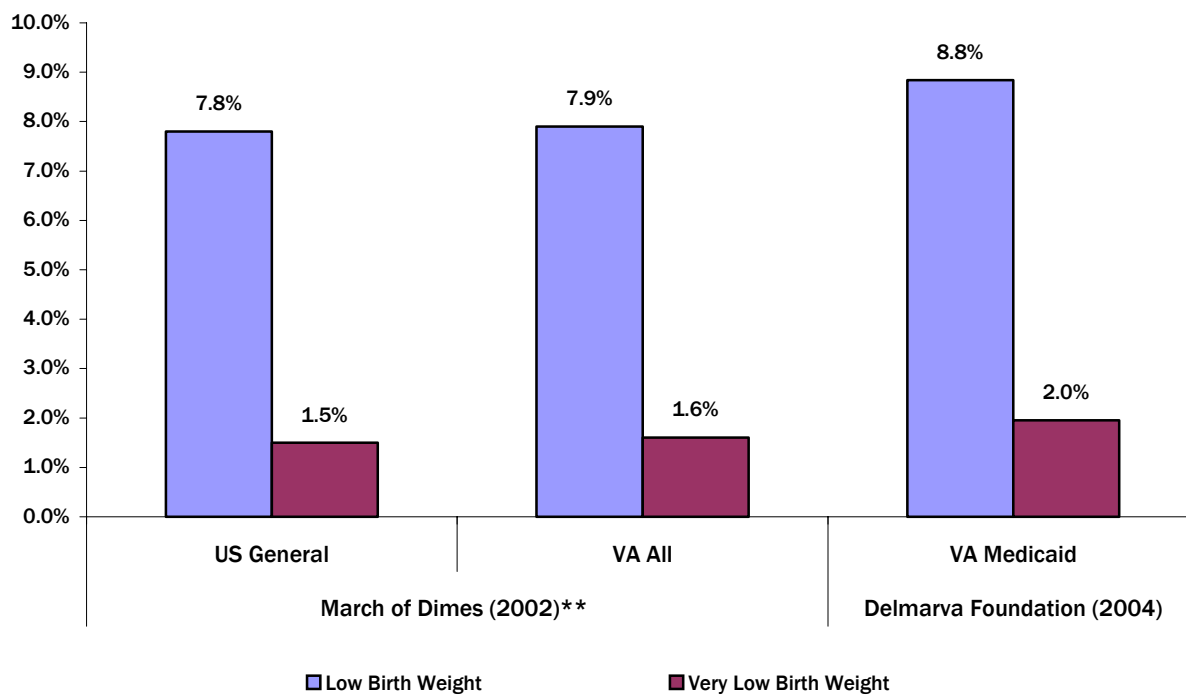


*Low birth weight = 1,501 to 2,500 grams; very low birth weight = 1,500 grams or less.

Virginia Medicaid Results for Low and Very Low Birth Weight in SFY '04 Were Compared to National and Virginia Statewide Benchmarks ²

Figure 8 displays the national and Virginia statewide and Medicaid birth weight results*. Both Low birth weight rates and very low birth weight rates for the VA Medicaid population for SFY '04 are marginally higher than Virginia state-wide and US national benchmarks.

Figure 8. Birth Weight Indicators*



*Low birth weight = 1,501 to 2,500 grams; very low birth weight = 1,500 grams or less.

** March of Dimes data is from their 2005 Report, but is based on the most current available data, which is from CY 2002.

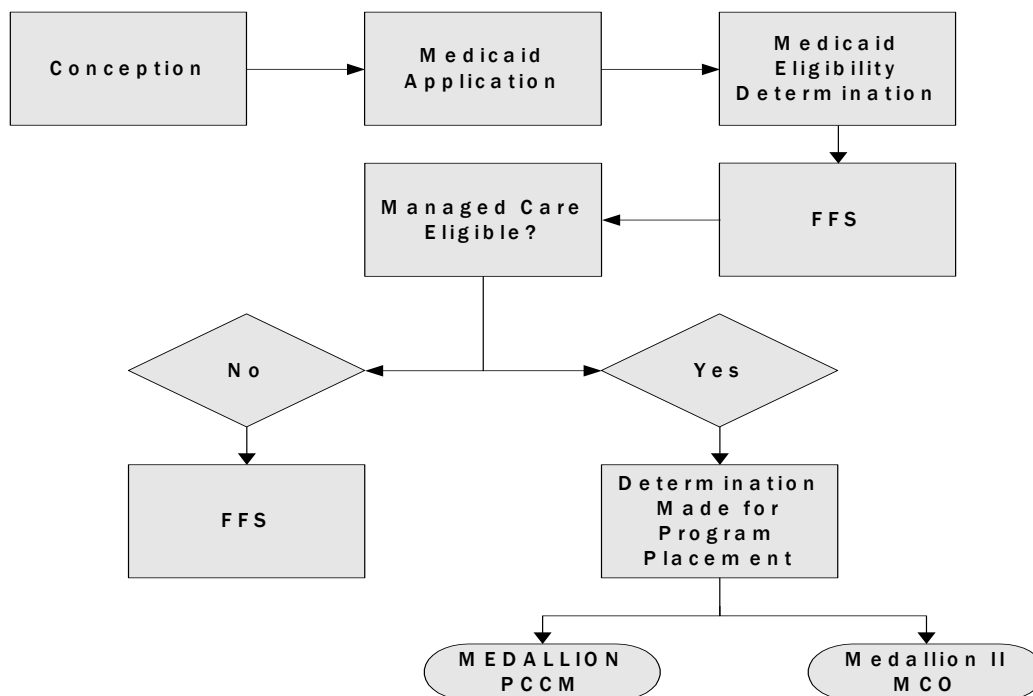
Section III

AT-A-GLANCE - Relationships Between Length of Time in Medicaid, Length of Time in a Medicaid Program, and Initiation of Prenatal Care

Medicaid Eligibility and Program Assignment Process for Women Newly Eligible for Medicaid due to Pregnancy

Figure 9 depicts the eligibility and program enrollment process for women new to Medicaid due to pregnancy. A description of the process follows.

Figure 9. Eligibility and Program Enrollment Process



Upon eligibility determination, all women are placed in the FFS program. Eligibility may be made retroactive to the date of conception or three months prior to the Medicaid application date, whichever is shortest. Prenatal care may be initiated at any time in the process after conception (a few women receive no prenatal care and apply for Medicaid after delivery). Women who are eligible for enrollment in a managed care

program are placed in pre-assignment. During pre-assignment, they remain in FFS and are asked to select a MEDALLION primary care provider or a Medallion II MCO. Women may remain in pre-assignment for approximately 30 days before being enrolled in a managed care program. In addition, women enrolled in a Medallion II MCO may change MCOs during the first 90 days of MCO enrollment for any reason. The administrative factors that may have affected the timing of the initiation of prenatal care delivered to newly eligible women were examined. For the purpose of this study, the program to which a recipient's care is attributed is based on the program in which the recipient was enrolled on the delivery date. This method of program attribution was used because the highest intensity of prenatal care services is generally received during the later stages of the pregnancy, thus this method attributes care to the program that would most likely have provided most of the services. Because recipients may switch programs during the gestational period, programs and providers other than those to which it was attributed may have provided early prenatal care. Seventy-six percent of all women in Virginia Medicaid programs during the study period began prenatal care in the first trimester of pregnancy. Most women began prenatal care before becoming eligible for Medicaid and before enrollment in a managed care program.

Relationship Between Timing of Medicaid Eligibility and Medicaid Program Enrollment

The percent of women in Medicaid who delivered babies during SFY '03 was 89% and 88% were newly eligible for Medicaid in SFY '04 due to becoming pregnant.

Table 1. SFY '03 Study population by Medicaid program and eligibility category

	FFS	MEDALLION PCCM	Medallion II MCO	All Medicaid
Other Medicaid	277 (3.8%)	259 (8.5%)	1758 (13.5%)	2294 (9.8%)
SSI	103 (1.4%)	48 (1.6%)	226 (1.7%)	377 (1.6%)
Newly Medicaid Eligible	6955 (94.8%)	2733 (89.9%)	10999 (84.7%)	20687 (88.6%)
Medicaid – All Eligibility	7335 (100%)	3040 (100%)	12983 (100%)	23358 (100%)

Table 2. SFY '04 Study population by Medicaid program and eligibility category

	FFS	MEDALLION PCCM	Medallion II MCO	All Medicaid
Other Medicaid	412 (5.3%)	254 (8.2%)	1985 (14.1%)	2651 (10.6%)
SSI	109 (1.4%)	73 (2.4%)	243 (1.7%)	4255 (1.7%)
Newly Medicaid Eligible	7306 (93.3%)	2780 (89.5%)	11816 (84.1%)	21902 (87.7%)
Medicaid – All Eligibility	7827 (100%)	3107 (100%)	14044 (100%)	24978 (100%)

The percentage of the MEDALLION and Medallion II population that was newly Medicaid eligible decreased more than 3% and 2% in SFY '03 and SFY '04 respectively, from SFY '02. Because a large majority of women included in this study were newly Medicaid eligible, nearly 89% and 88% in SFY '03 and SFY '04 respectively, analyses were included to investigate how eligibility and enrollment processes may influence the timing of care. All subsequent analyses pertain to the newly Medicaid eligible population only.

Fee-for-Service

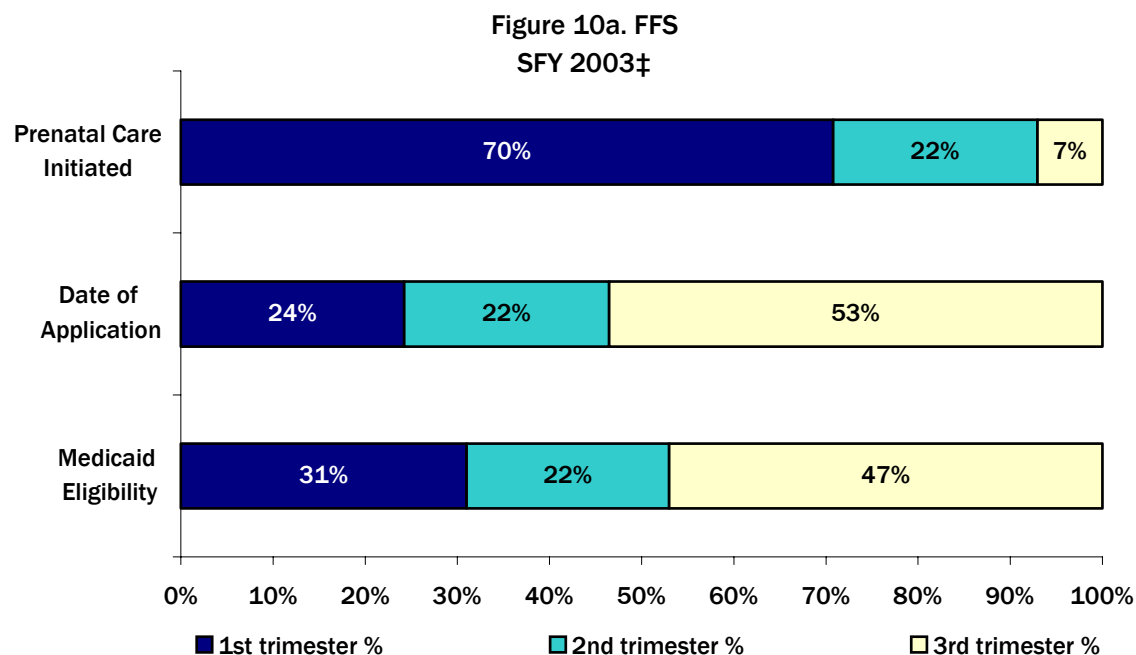
Women in FFS began prenatal care and applied for Medicaid later in pregnancy than women in Medallion II.

Of the women who were in the FFS program at the time of delivery,

- 70% (SFY '03) and 71% (SFY '04) began prenatal care during the first trimester of pregnancy.
- 24% (SFY '03) and 27% (SFY '04) were in the first trimester of pregnancy when they applied for Medicaid.
- 31% (SFY '03) and 39% (SFY '04) were in the first trimester when they were determined eligible for Medicaid (some were retroactive).

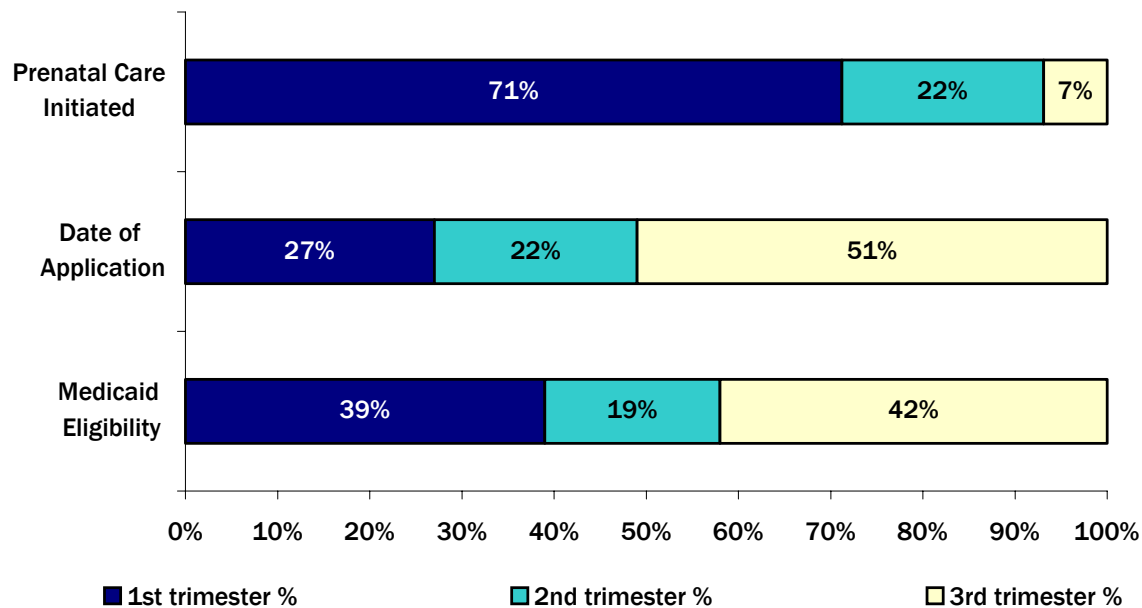
Because enrollment in an MCO requires more time, lower rates of care and poorer outcomes observed in the fee-for-service plan may be explained by the fact that fee-for-service participants enter Medicaid closer to when they give birth.

Figures 10a and 10b show the time analysis of eligibility/enrollment process for newly Medicaid eligible pregnant women in FFS during SFY '03 and SFY '04.



‡Figures may not equal 100% due to rounding.

Figure 10b. FFS
SFY 2004



MEDALLION PCCM

Of the women in the PCCM program at the time of delivery,

- 83% (SFY '03) and 81% (SFY '04) began care in the first trimester.
- 74% (SFY '03) and 73% (SFY '04) were in the first trimester of pregnancy when they applied for Medicaid.
- 85% (SFY '03) and 86% (SFY '04) were in the first trimester when they became Medicaid eligible (including some who became eligible retroactively). This is an increase of 11% to 12% respectively from SFY '02.
- Only 18% (SFY '03) and 21% (SFY '04) were in the first trimester when they enrolled in the PCCM program. This is an increase of 13% to 16% respectively from SFY '02.
- 27% (SFY '03) and 24% (SFY '04) were in the third trimester when they enrolled in the PCCM program. This reflects a 15% and 18% decrease respectively from SFY '02.

Figures 11a and 11b show the time analysis of eligibility/enrollment process for newly Medicaid eligible pregnant women in PCCM during SFY '03 and SFY '04 respectively.

Figure 11a. MEDALLION-PCCM
SFY 2003

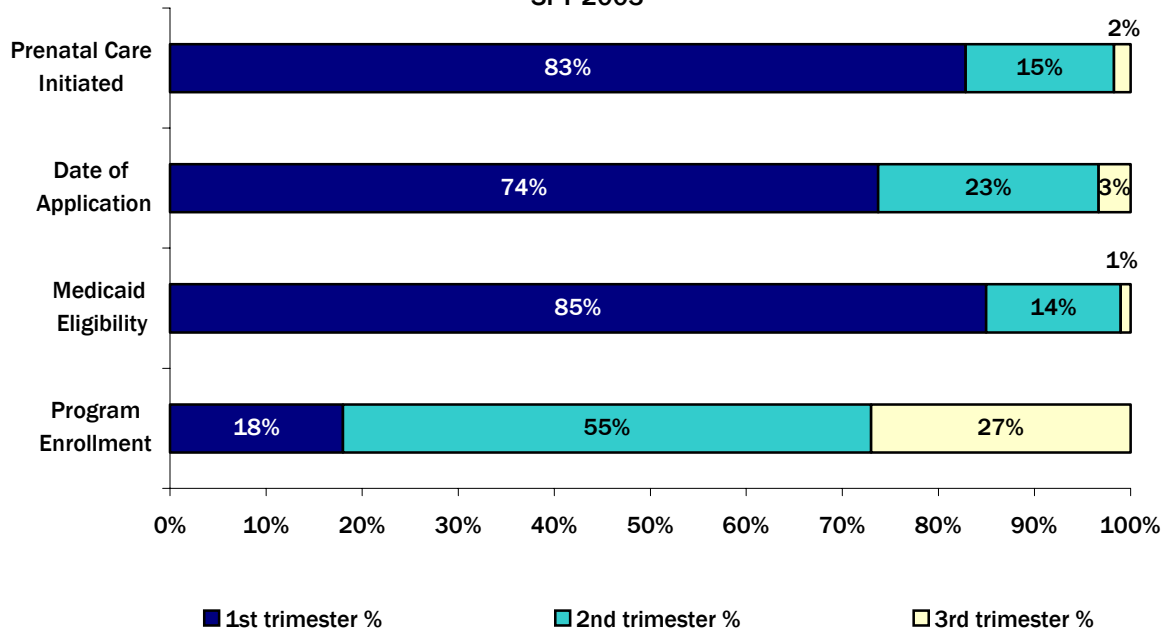
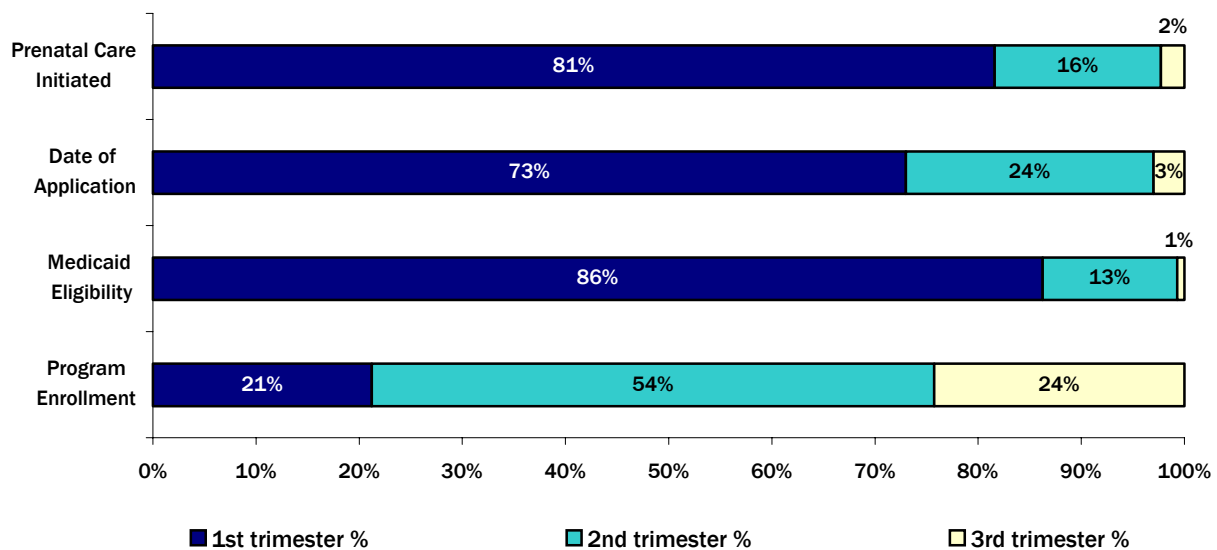


Figure 11b. MEDALLION-PCCM
SFY 2004‡



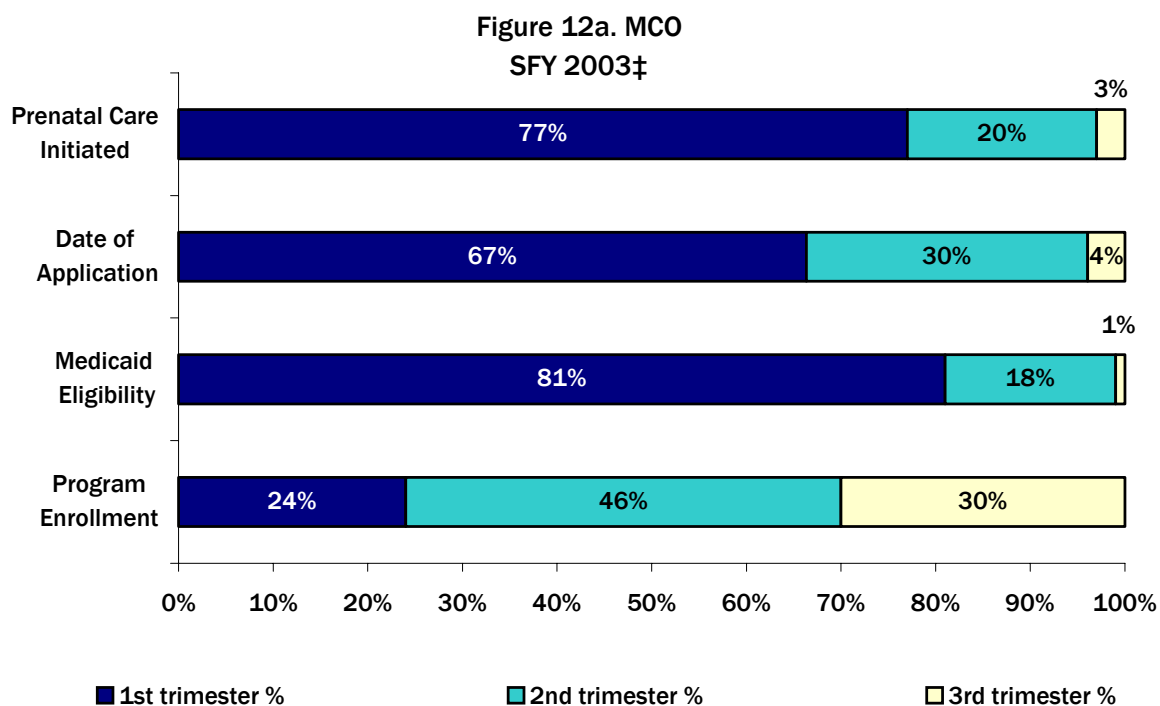
‡Figures may not equal 100% due to rounding.

Medallion II MCO

Of the women in Medallion II MCOs at the time of delivery,

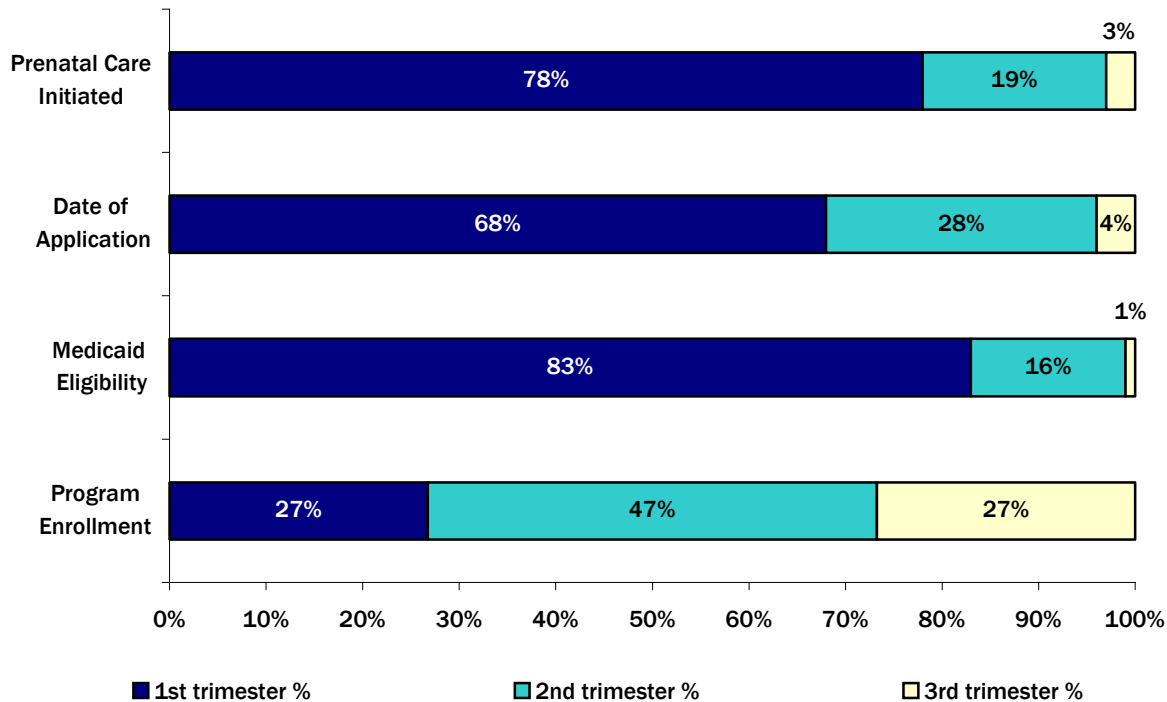
- 77% (SFY '03) and 78% (SFY '04) began care in the first trimester.
- 67% (SFY '03) and 68% (SFY '04) were in the first trimester when they applied for Medicaid.
- 81% (SFY '03) and 83% (SFY '04) were in the first trimester when they became Medicaid eligible (some became eligible retroactively).
- Only 24% (SFY '03) and 27% (SFY '04) were in the first trimester when they enrolled in an MCO.
- 30% (SFY '03) and 27% (SFY '04) were in the third trimester when they enrolled in an MCO. These rates are down from 58% in SFY '02.

Figures 12a and Figure 12b show the time analysis of eligibility/enrollment process for newly Medicaid eligible pregnant women in MCOs during SFY '03 and SFY '04.



†Figures may not equal 100% due to rounding.

Figure 12b. MCO
SFY 2004‡



Comparison of Programs—Time Analysis

Figures 13 through 15 display comparative time analyses of each milestone by Medicaid program. In general, rates for the managed care programs are comparable. Rates for the FFS are below those of the managed care programs. While fewer women in the FFS program initiated prenatal care in the first trimester, this is probably because fewer women in the FFS program were eligible for Medicaid in the first trimester.

Figures 13a and 13b show the time analysis of initiation of prenatal care for newly Medicaid eligible women by program for SFY '03 and SFY '04.

‡Figures may not equal 100% due to rounding.

Figure 13a. Prenatal Care Initiated
SFY 2003‡

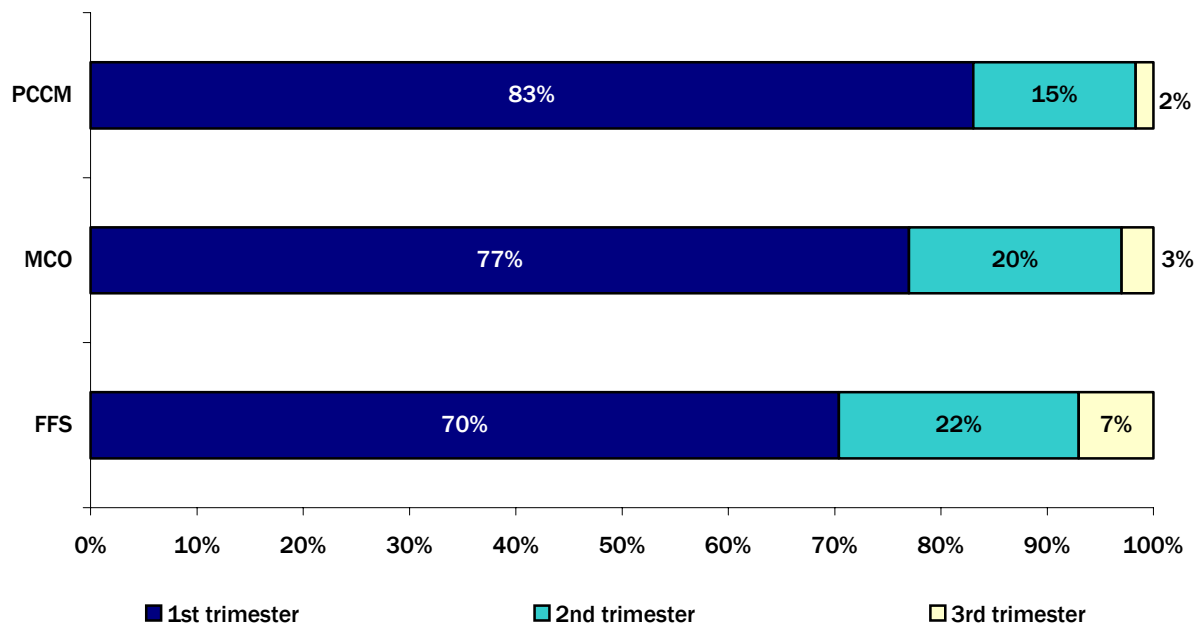
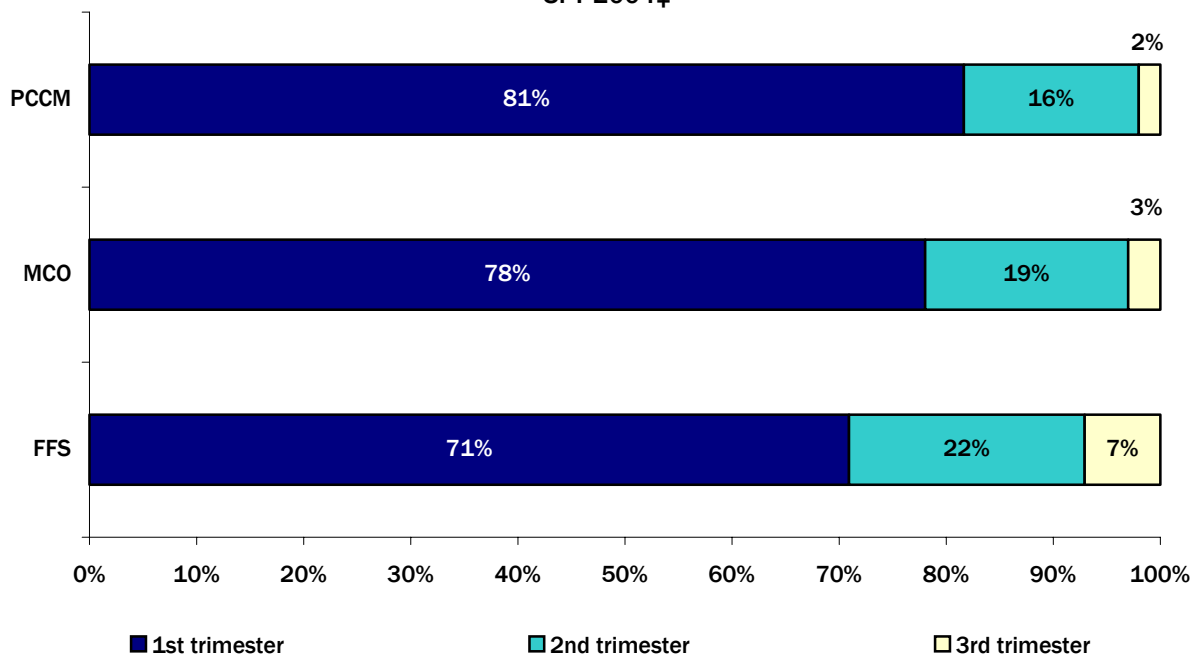


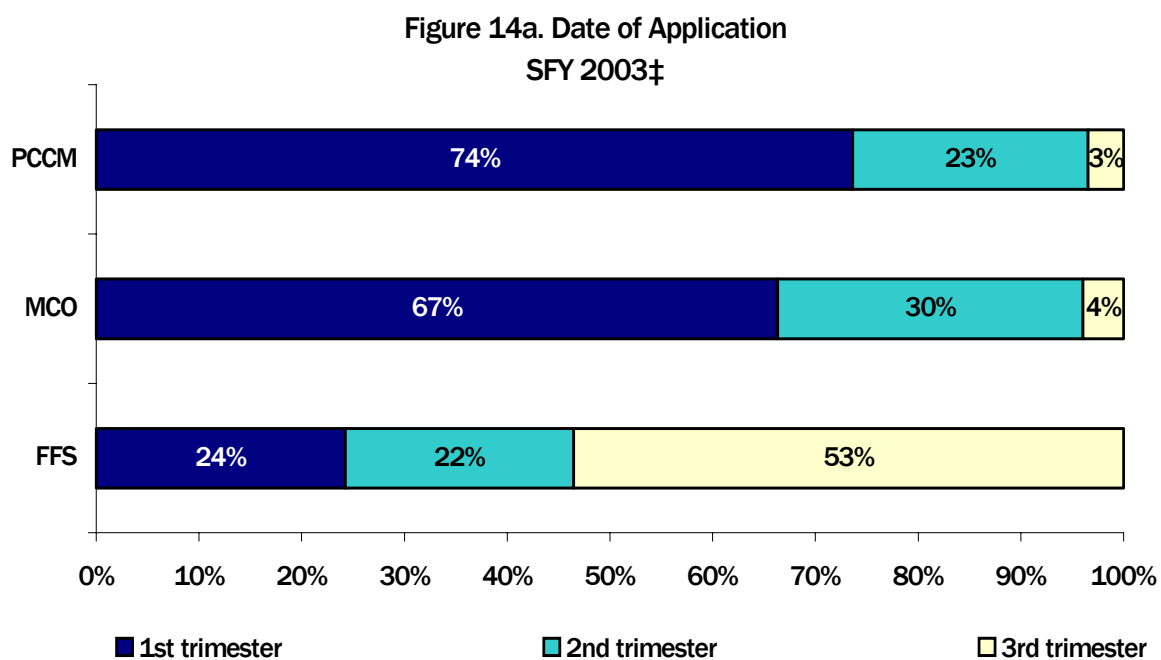
Figure 13b. Prenatal Care Initiated
SFY 2004‡



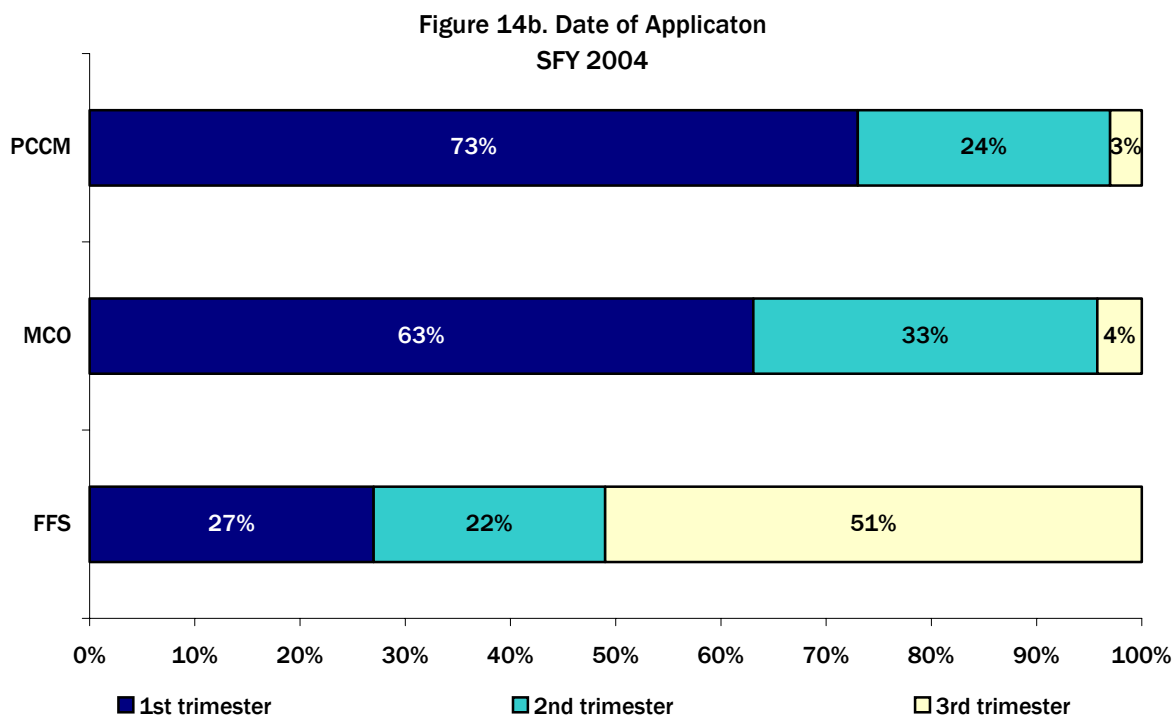
‡Figures may not equal 100% due to rounding.

The majority of the women in the FFS program did not apply for Medicaid until the third trimester. On the other hand, the majority of women in managed care applied for Medicaid while in the first trimester. Women who applied for Medicaid late in pregnancy may have delivered while still in FFS, during the pre-assignment process, although they later became eligible for enrollment in managed care.

Figures 14a and 14b show the time analysis of Medicaid application by newly Medicaid eligible women by program for SFY '03 and SFY '04.



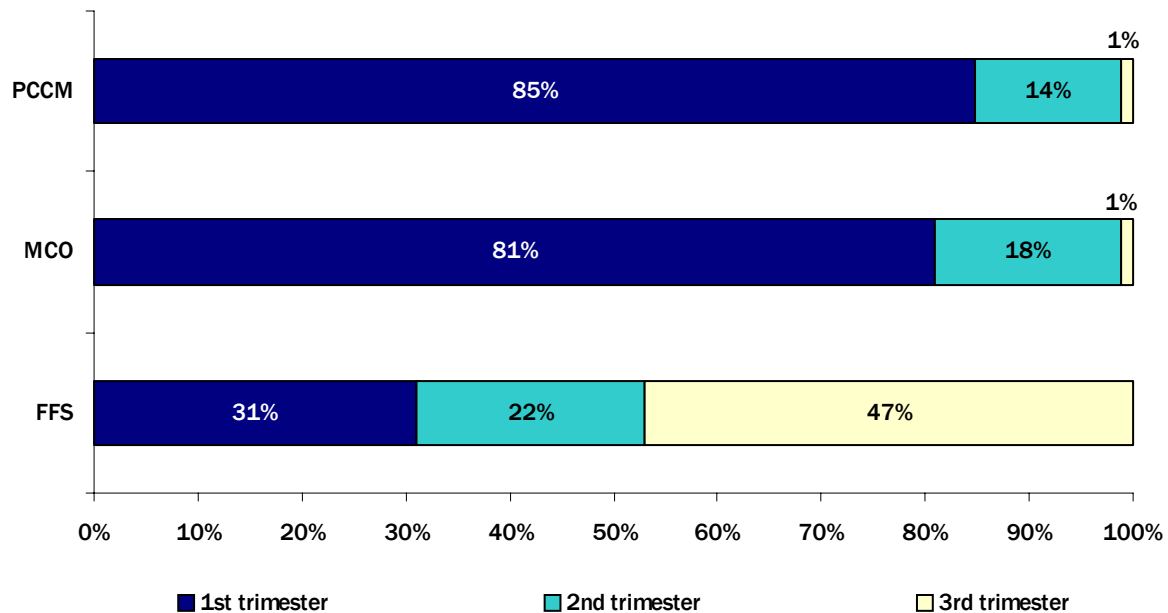
‡Figures may not equal 100% due to rounding.



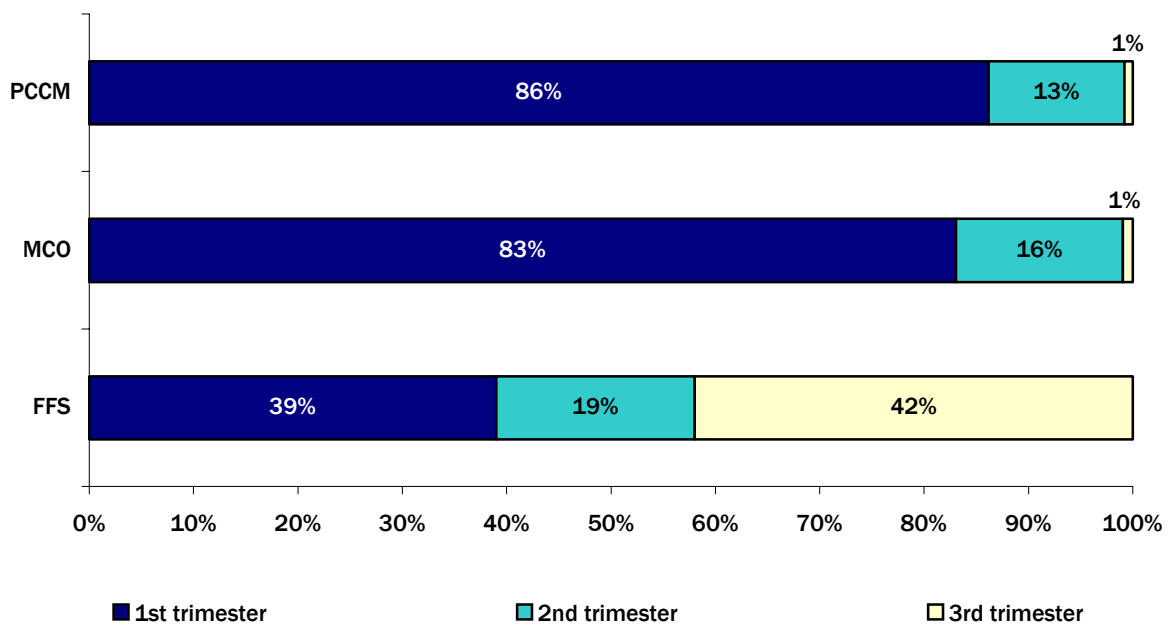
The majority of the women in the FFS program were determined to be Medicaid eligible in the third trimester, due to the fact that they were already in the late second or third trimester at the time of application for Medicaid. Some women that applied for Medicaid late in pregnancy and were deemed managed care eligible delivered while still in the pre-assignment process, before they could be assigned to a managed care program and plan. Therefore, they were still in FFS at the time of delivery.

Figures 15a and 15b show the time analysis of Medicaid eligibility for newly Medicaid eligible women by program for SFY '03 and SFY '04.

**Figure 15a. Medicaid Eligibility
SFY 2003**



**Figure 15b. Medicaid Eligibility
SFY 2004**



Figures 16a and 16b show the proportion of women in each trimester of pregnancy at program enrollment for the PCCM and MCO programs is comparable. The length of time spent in pre-assignment resulted in late managed care program enrollment. However, the percent enrolled for both programs in the first trimester has increased substantially from SFY '02, when 11% of those in the PCCM were enrolled in the first trimester, and when 16% of those in the MCO program were enrolled in the first trimester.

**Figure 16a. Program Enrollment
SFY 2003**

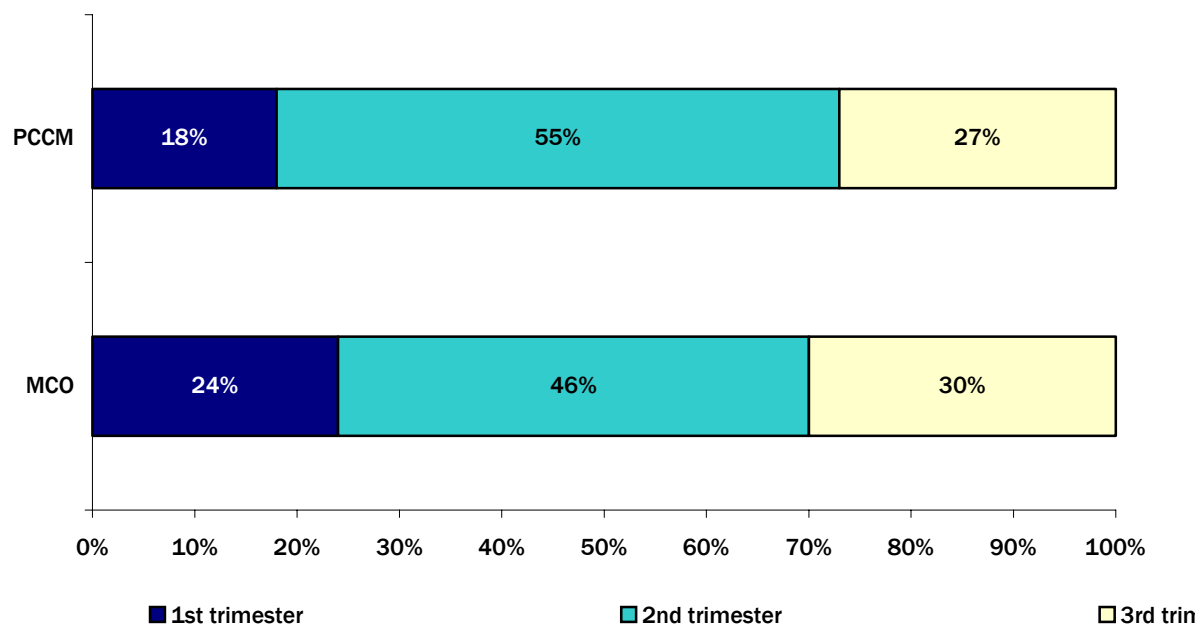
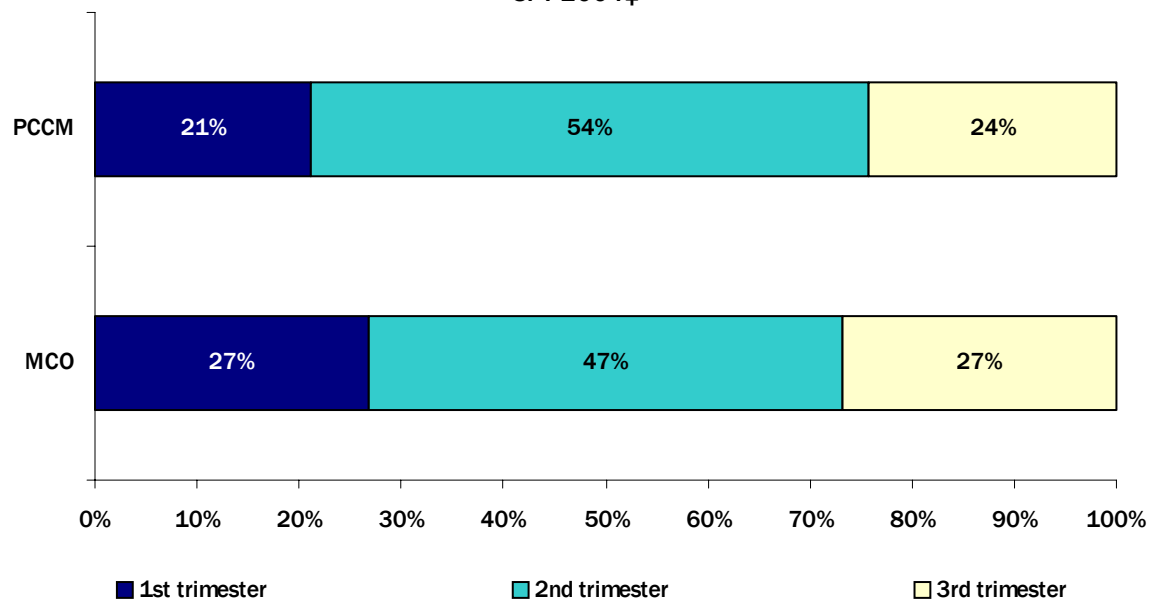


Figure 16b. Program Enrollment
SFY 2004‡



Newly Medicaid Eligible Pregnant Women Received Care Within Four Weeks of Enrollment in the Medicaid Program

A large majority of women who enrolled in a Medicaid program due to their pregnancy received prenatal care within four weeks of their program enrollment. The percentage of women who received care within this time period remained the same for SFY '02 – SFY '04.

‡Figures may not equal 100% due to rounding.

Table 3A. Initiation of care within 4 weeks of program enrollment by program type for newly eligible Medicaid recipients that gave birth during SFY '03

	FFS	MEDALLION (PCCM)	Medallion II (MCO)	Medicaid Program Aggregate All
Newly Medicaid Eligible	93%	98%	97%	96%

Table 3B. Initiation of care within 4 weeks of program enrollment by program type for newly eligible Medicaid recipients that gave birth during SFY '04.

	FFS	MEDALLION (PCCM)	Medallion II (MCO)	Medicaid Program Aggregate All
Newly Medicaid Eligible	94%	97%	96%	96%

Section IV

AT-A-GLANCE - Demographic Characteristics of Study Population

Race Distribution

The racial distribution of births in the FFS program has shifted from SFY '02 as compared to SFY '03 and SFY '04. In SFY '02, 38% of these births were to white women and 24% were to African American women. In SFY '03, 41% of births were attributable to white women and 36% belonged to African American women. In SFY '04, 43% of births were attributable to white women and 35% belonged to African American women. While the number of births delivered by white women in the FFS program increased slightly from SFY '02 to SFY '03 and SFY '04 the number of births delivered by African American women increased dramatically over the same time period in the FFS program. In both SFY '03 and SFY '04, Hispanic women accounted for 17% of births while they accounted for 30% of the births in SFY '02. Percentages of births delivered to White, African American and Hispanic women for both MEDALLION and Medallion II have remained relatively constant over the same time period (SFY '02 to SFY '03 and SFY '04).

Table 4A. Racial distribution by program for Virginia Medicaid recipients that gave birth during SFY '03

Population	White	African American	Asian	Hispanic	Other
FFS	41%	36%	5%	17%	1%
MEDALLION (PCCM)	77%	19%	1%	3%	0%
Medallion II (MCO)	43%	51%	2%	3%	1%

Table 4B. Racial distribution by program for Virginia Medicaid recipients that gave birth during SFY '04

Population	White	African American	Asian	Hispanic	Other
FFS	43%	35%	4%	17%	1%
MEDALLION (PCCM)	77%	18%	1%	3%	1%
Medallion II (MCO)	42%	51%	2%	4%	1%

The overall percentage of births to white women dropped from 51% in SFY '02 to 47% in both SFY '03 and SFY '04, but the percentage of births to African-American women rose from 38% in SFY '02 to 42% in SFY '03-04. The percentage of births to women from other minorities, including Hispanics, remained constant at 11% in SFY '02 through SFY '04.

Table 5. Change in racial distribution of Virginia Medicaid recipients that gave birth during SFY 1998–2004

Year (SFY)	White	African American	Other
1998	51%	42%	7%
1999	49%	45%	6%
2000	57%	38%	4%
2002	51%	38%	11%
2003	47%	42%	11%
2004	47%	42%	11%

Figure 17a shows the racial distribution by program type and eligibility criteria for Virginia Medicaid recipients that gave birth during SFY '03.

Figure 17a. Race
SFY 2003

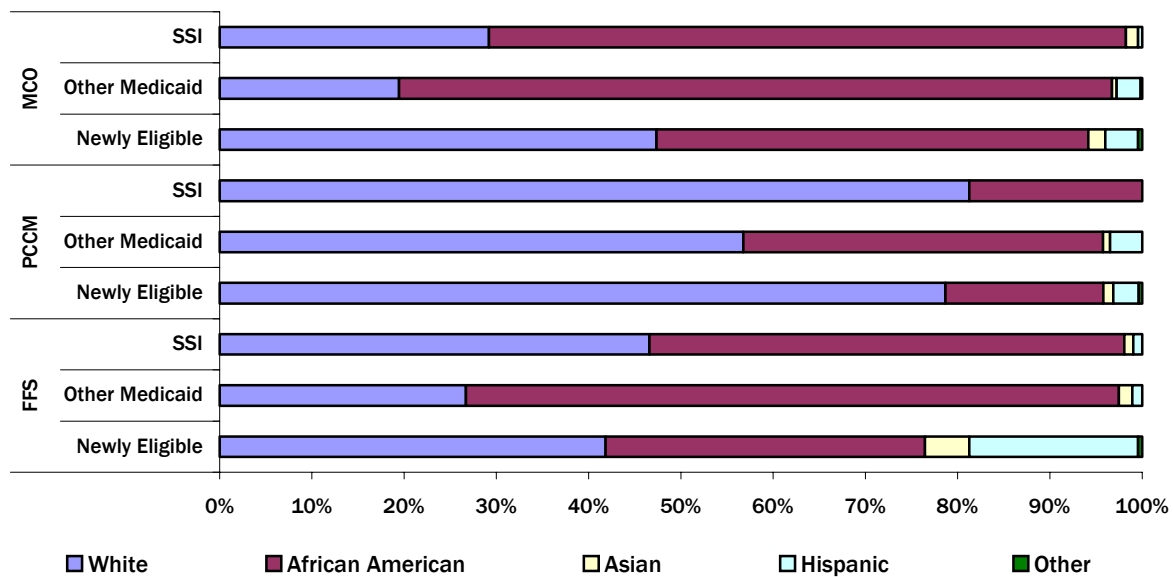
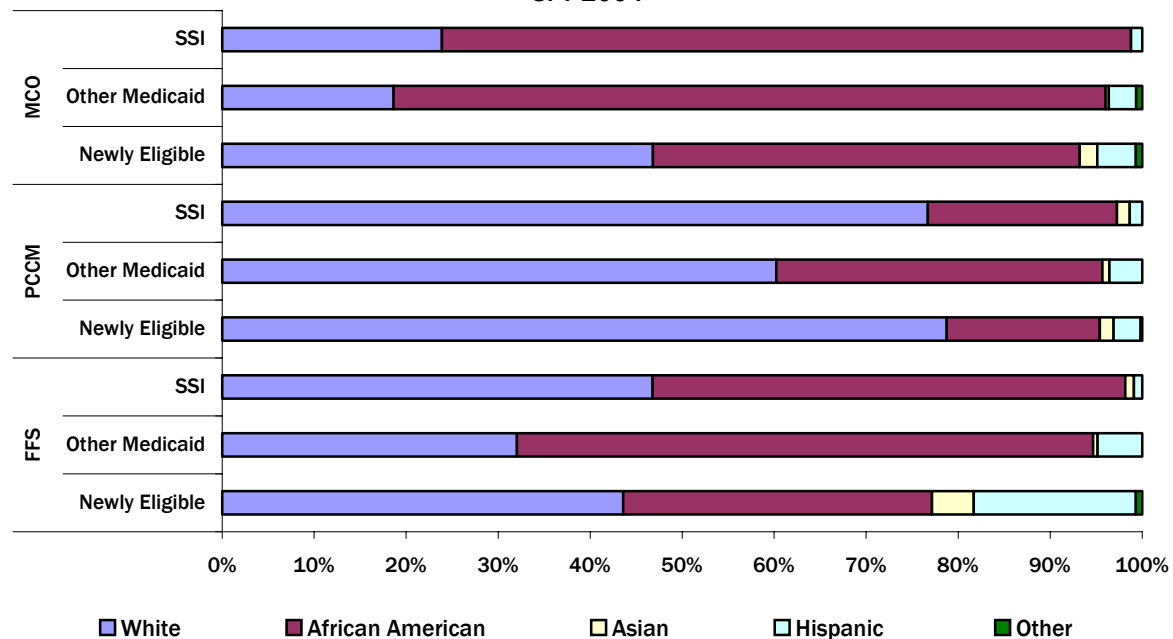


Figure 17b shows the racial distribution by program type and eligibility criteria for Virginia Medicaid recipients that gave birth during SFY '04.

Figure 17b. Race
SFY 2004



Age Distribution

Of the women in Medicaid who gave birth during the study period, 18% were age 19 or younger in SFY '03 and 18% were age 19 or younger in SFY '04. This is the same percentage as women of this age group who gave birth in SFY '02. The FFS program had a higher percentage of births in the 30 and over age group than the other programs. The largest group by far was the 20-29 year age group that accounted for 65% of the All Medicaid births for both years.

Table 6a. Age distribution by program for Virginia Medicaid recipients that gave birth during SFY '03

Population	19 and Under	20-29	30 and Over
FFS	19%	60%	21%
MEDALLION (PCCM)	18%	66%	16%
Medallion II (MCO)	18%	67%	15%
All Medicaid	18%	65%	17%

Table 6b. Age distribution by program for Virginia Medicaid recipients that gave birth during SFY '04

Population	19 and Under	20-29	30 and Over
FFS	18%	60%	22%
MEDALLION (PCCM)	17%	67%	16%
Medallion II (MCO)	18%	67%	15%
All Medicaid	18%	65%	17%

The percentage of Medicaid recipients giving birth that were 19 years old or younger was comparable in SFY '03 and SFY '04 as compared to SFY '02. Births in the 30 and over age group have remained steady over the last few years. Across the FFS and Medallion II programs, consistent majorities of women newly eligible to Medicaid are in the 20-29 age group.

Table 7. Age distribution of Virginia Medicaid recipients that gave birth during SFY 1998–2004 ⁶

Year	19 and Under	20 to 29	30 and Over
1998	25%	61%	14%
1999	26%	59%	15%
2000	20%	63%	17%
2002	18%	65%	17%
2003	18%	65%	17%
2004	18%	65%	17%

⁶ Results from 1998 and 1999 provided by George Mason University.

Figures 18a and 18b show the age distribution by program type and eligibility criteria for Virginia Medicaid recipients that gave birth during SFY '03 and SFY '04

Figure 18a. Age
SFY 2003

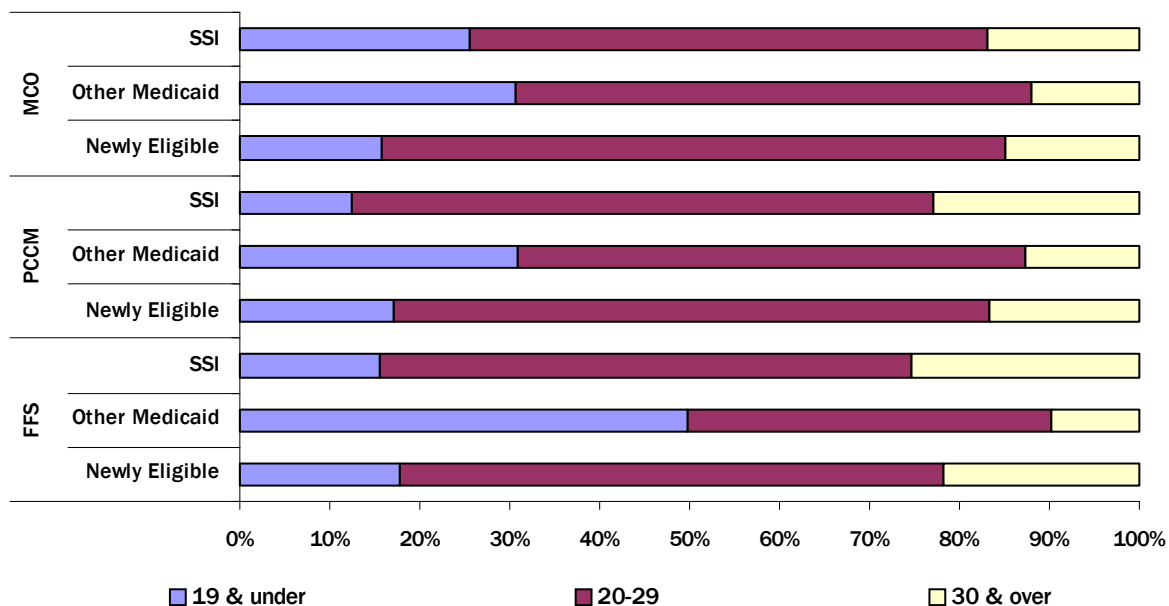
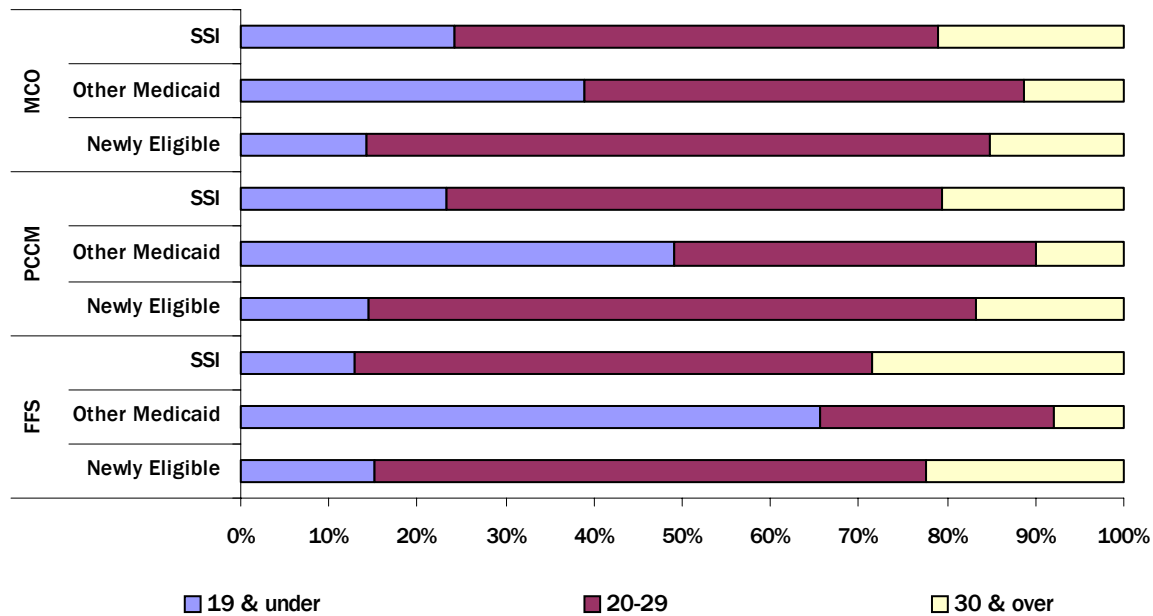


Figure 18b. Age
SFY 2004

Detailed Outcomes

The tables in the following section provide detailed information on study outcomes, including

- Initiation of care in the first trimester of pregnancy.
- Adequacy and timeliness of prenatal care based on the following Prenatal Care Indices:
 - Initiation of care within four months of conception.
 - Completion of *adequate* and *adequate plus* number of expected prenatal care visits.
 - Composite score—a combination of the scores for initiation of care (timeliness) and number of visits (adequacy of care). Kotelchuck Index.
- Low birth weight (1,501 to 2,500 grams).
- Very low birth weight (1,500 grams or less).

Outcomes are provided by Medicaid program, eligibility category, race, and individual MCO. 88% of the women who received prenatal care services through Medicaid programs were newly Medicaid eligible because of pregnancy.

For purposes of this assessment, care was attributed to the Medicaid program and/or MCO a woman was associated with at the time of delivery, regardless of initial care delivery system. Due to late program enrollment, attributions to Medallion II or a particular MCO regarding the study outcomes must be made with extreme caution.

White Women Started Care Earlier and had More Adequate Care and Fewer Low and Very Low Birth Weight Babies

Table 9A. Racial group analysis of Medicaid recipients that gave birth in SFY '03: Prenatal care in first trimester, adequacy of care (APNCU Composite Index), and low and very low birth weight

Indicator	White	African American	Asian	Hispanic
Prenatal Care in First Trimester	80%	74%	69%	65%
Adequacy of Care	79%	71%	65%	61%
Low birth weight	6.3%	10.1%	4.8%	5.4%
Very low birth weight	1.1%	2.4%	2.1%	0.4%

Table 9B. Racial group analysis of Medicaid recipients that gave birth in SFY '04: Prenatal care in first trimester, adequacy of care (APNCU Composite Index), and low and very low birth weight

Indicator	White	African American	Asian	Hispanic
Prenatal Care in First Trimester	80%	75%	66%	66%
Adequacy of Care	80%	72%	67%	64%
Low birth weight	6.5%	10.7%	7.7%	5.5%
Very low birth weight	1.3%	2.5%	1.0%	1.6%

Fewer Women in FFS and Other Medicaid Categories Initiated Prenatal Care in the First Trimester

Table 10A. Initiation of care within first trimester by program type and eligibility criteria for Medicaid recipients that gave birth during SFY '03

	FFS	MEDALLION* (PCCM)	Medallion II* (MCO)	All Medicaid Program
Other Medicaid	72%	78%	71%	72%
SSI†	87%	94%	76%	81%
Newly Medicaid Eligible	70%	83%	78%	76%
Medicaid – All Eligibility	70%	83%	77%	76%

*The largest percentage of women enrolled in the program during the second trimester

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Table 10B. Initiation of care within first trimester by program type and eligibility criteria for Medicaid recipients that gave birth during SFY '04

	FFS	MEDALLION* (PCCM)	Medallion II* (MCO)	All Medicaid Program
Other Medicaid	73%	76%	73%	74%
SSI†	84%	85%	78%	81%
Newly Medicaid Eligible	71%	82%	79%	77%
Medicaid – All Eligibility	71%	81%	78%	76%

*The largest percentage of women enrolled in the program during the second trimester

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Fewer Women in FFS Initiated Prenatal Care Within Four Months of Conception

Table 11A. Percentage of mothers receiving adequately initiated prenatal care (APNCU Care Initiation Index) by program type and eligibility criteria during SFY '03

	FFS	MEDALLION (PCCM)	Medallion II (MCO)	All Medicaid Program
Other Medicaid	82%	85%	80%	81%
SSI†	86%	94%	85%	86%
Newly Medicaid Eligible	79%	92%	88%	86%
Medicaid – All Eligibility	79%	91%	87%	85%

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Table 11B. Percentage of mothers receiving adequately initiated prenatal care (APNCU Care Initiation Index) by program type and eligibility criteria during SFY '04

	FFS	MEDALLION (PCCM)	Medallion II (MCO)	All Medicaid Program
Other Medicaid	82%	85%	84%	84%
SSI†	91%	93%	87%	89%
Newly Medicaid Eligible	81%	91%	89%	87%
Medicaid – All Eligibility	81%	91%	88%	86%

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Fewer Women in FFS Received Expected Number of Prenatal Care Visits

Table 12A. Percentage of mothers receiving all expected visits (APNCU Received Services Index) during entire pregnancy in SFY '03

	FFS	MEDALLION* (PCCM)	Medallion II* (MCO)	All Medicaid Program
Other Medicaid	81%	87%	78%	79%
SSI†	84%	90%	81%	83%
Newly Medicaid Eligible	81%	92%	87%	86%
Medicaid – All Eligibility	81%	91%	85%	85%

*The largest percentage of women enrolled in the program during the second trimester

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Table 12B. Percentage of mothers receiving all expected visits (APNCU Received Services Index) during entire pregnancy in SFY '04.

	FFS	MEDALLION* (PCCM)	Medallion II* (MCO)	All Medicaid Program
Other Medicaid	80%	85%	79%	80%
SSI†	80%	90%	80%	82%
Newly Medicaid Eligible	80%	91%	87%	85%
Medicaid – All Eligibility	80%	90%	86%	85%

*The largest percentage of women enrolled in the program during the second trimester

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Women in FFS had Lower Composite Scores than Women in Medallion II

Table 13A. Percentage of mothers receiving adequate prenatal care (APNCU Composite Index) by program type and eligibility criteria for Virginia Medicaid recipients that gave birth during SFY '03

	FFS	MEDALLION* (PCCM)	Medallion II* (MCO)	All Medicaid Program
Other Medicaid	69%	76%	66%	68%
SSI†	76%	85%	70%	74%
Newly Medicaid Eligible	67%	85%	77%	75%
Medicaid – All Eligibility	67%	85%	76%	74%

*The largest percentage of women enrolled in the program during the second trimester.

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Table 13B. Percentage of mothers receiving adequate prenatal care (APNCU Composite Index) by program type and eligibility criteria for Virginia Medicaid recipients that gave birth during SFY '04.

	FFS	MEDALLION* (PCCM)	Medallion II* (MCO)	All Medicaid Program
Other Medicaid	68%	76%	68%	69%
SSI†	72%	86%	72%	75%
Newly Medicaid Eligible	68%	84%	78%	76%
Medicaid – All Eligibility	68%	83%	77%	75%

*The largest percentage of women enrolled in the program during the second trimester.

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Medicaid Program and Reason for Eligibility had Little Association with Birth Weight Outcomes

The Other Medicaid and SSI categories had somewhat higher rates of low birth weight babies than the Newly Medicaid Eligible group, nearly 89% and 88% in SFY '03 and SFY '04 respectively, while the total number of low birth weight births is under 3,000. Further examination of the causes and outcomes of the increased rate of low weight births is warranted. There are minimal differences between FFS, MEDALLION, and Medallion II programs with respect to the percentage of low and very low birth weight babies. Note: because 88% of the population assessed in this report was newly Medicaid eligible (because of pregnancy), timely initiation of care must occur prior to Medicaid eligibility and managed care program enrollment.

Table 14A Rate of low birth weight (1,501–2,500 grams) by program type and eligibility during SFY '03*

	FFS	MEDALLION (PCCM)	Medallion II (MCO)	All Medicaid Program
Other Medicaid	11.5%	6.1%	11.7%	11.0%
SSI†	14.0%	6.0%	14.5%	13.3%
Newly Medicaid Eligible	8.7%	6.7%	7.9%	8.0%
Medicaid – All Eligibility	8.9%	6.6%	8.5%	8.4%

*Reported numbers represent the number of low birth weight babies in the category. This differs from last year's study, which reported the total number of cases on which the percentage figure was based.

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Table 14B Rate of low birth weight (1,501–2,500 grams) by program type and eligibility during SFY '04*

	FFS	MEDALLION (PCCM)	Medallion II (MCO)	All Medicaid Program
Other Medicaid	10.8%	10.4%	11.1%	10.9%
SSI†	11.7%	10.8%	19.4%	16.0%
Newly Medicaid Eligible	9.1%	7.2%	8.3%	8.4%
Medicaid – All Eligibility	9.2%	7.6%	8.9%	8.8%

*Reported numbers represent the number of low birth weight babies in the category. This differs from last year's study, which reported the total number of cases on which the percentage figure was based.

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Table 15A. Rate of very low birth weight (1,500 grams and less) by program type and eligibility criteria during SFY '03*.

	FFS	MEDALLION (PCCM)	Medallion II (MCO)	All Medicaid Program
Other Medicaid	2.9%	2.3%	2.7%	2.7%
SSI†	2.8%	4.0%	1.8%	2.3%
Newly Medicaid Eligible	2.6%	1.0%	1.3%	1.7%
Medicaid – All Eligibility	2.6%	1.1%	1.5%	1.8%

*Reported numbers represent the number of low birth weight babies in the category.

†The variability in these rates may be partially attributable to the low numbers in the subcategories.

Table 15B. Rate of very low birth weight (1,500 grams and less) by program type and eligibility criteria during SFY '04*.

	FFS	MEDALLION (PCCM)	Medallion II (MCO)	All Medicaid Program
Other Medicaid	4.2%	3.9%	2.8%	3.1%
SSI†	5.4%	0.0%	2.4%	2.8%
Newly Medicaid Eligible	2.4%	1.2%	1.6%	1.8%
Medicaid – All Eligibility	2.5%	1.4%	1.7%	2.0%

*Reported numbers represent the number of low birth weight babies in the category.

†The variability in these rates may be partially attributable to the low numbers in the subcategories.